

## MOBILE TELECOMMUNICATIONS NETWORK WITH IMPROVED DOWNLINK CAPACITY

### Abstract of the Disclosure

According to the SDMA approach, the beamformer employed at each base station of a GSM network is designed to resolve in space the multiple co-channel users allowed in the cell sector by generating appropriate beam patterns for each one of them. Nevertheless, there are cases where the CIR of one of the co-channel mobile users, monitored in the base station BS, falls below a preset threshold value. In this case a channel re-allocation is instructed for this user. This allows either tighter reuse of channels for the same number of users in each cell/sector or an increased number of co-channel users in each cell/sector.